What Are Asymmetric Strategies?

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This briefing presents an abbreviated description of RAND’s work on asymmetric strategies done in support of the 1997 Quadrennial Defense Review. It describes asymmetric strategies, why they matter in defense planning, and how they may affect future U.S. military activities. Adversaries will likely choose asymmetric strategies in future conflicts because emulating U.S. military force structure and its related strategy is too expensive for other countries, forcing prospective adversaries to pursue different approaches to confrontation. Adversary asymmetric strategies will target U.S. vulnerabilities rather than directly attacking U.S. strengths.

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Comments and inquiries are welcome and should be addressed to the principal author.
SUMMARY

The 1997 Quadrennial Defense Review (QDR) evaluated future U.S. strategy and force structure. It paid particular attention to a set of threats referred to as asymmetric challenges or asymmetric means. This documented briefing provides a brief description of the asymmetric strategies that employ these challenges.

Today, U.S. forces appear capable of defeating the normally postulated military threats, including those associated with major theater wars. But many of these postulated threats are relatively symmetric in character, directly seeking to combat U.S. strengths. Future adversaries appear more likely to attack U.S. vulnerabilities and to do so using largely asymmetric means, in part because they cannot afford military forces and capabilities comparable to those of the United States.

This concept is not new; much of military history and theory focuses on asymmetric challenges. For various reasons explained herein, the United States often fails to appreciate these threats and therefore does not adequately prepare for them. In modern warfare, the performance of U.S. forces could be substantially degraded if they are faced with threats for which they are inadequately prepared (lacking the needed doctrine, operational concepts, military R&D and acquisitions, force structure and force posture, and/or training). While U.S. doctrine as explained in *Joint Vision 2010* calls for "full-dimensional protection" of U.S. forces, such protection is extremely expensive and does not presently exist.

It seems likely that asymmetric strategies will dominate the threats posed by U.S. adversaries in the foreseeable future. Therefore, understanding these threats and responses to them is fundamental to U.S. military strategy and planning for the future.

The goal of this project was primarily to characterize asymmetric threats as a first stage in helping U.S. leaders to recognize them, and only secondarily to suggest U.S. responses. A follow-on research effort is currently pursuing U.S. means for countering these threats according to an approach outlined herein.
ACKNOWLEDGMENTS

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### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AWACS</td>
<td>Airborne Warning and Control System</td>
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<tr>
<td>BW</td>
<td>Biological weapons</td>
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<td>CBW</td>
<td>Chemical and biological weapons</td>
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<td>CONOPs</td>
<td>Concepts of operation</td>
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<td>CW</td>
<td>Chemical weapons</td>
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<td>DoD</td>
<td>Department of Defense</td>
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<td>DSP</td>
<td>Defense Support Program</td>
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<td>IDF</td>
<td>Israeli Defense Force</td>
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<td>IW</td>
<td>Information warfare</td>
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<td>LOCs</td>
<td>Lines of communication</td>
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<tr>
<td>MOPP</td>
<td>Mission-oriented protective posture</td>
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<td>MTW</td>
<td>Major theater war</td>
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<td>QDR</td>
<td>Quadrennial Defense Review</td>
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<td>RMA</td>
<td>Revolution in military affairs</td>
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<tr>
<td>SAM</td>
<td>Surface-to-air missile</td>
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<td>SOF</td>
<td>Special Operations Forces</td>
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<td>SWORD</td>
<td>Short-range air defense with optimized radar distribution</td>
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<tr>
<td>TBM</td>
<td>Theater ballistic missile</td>
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<tr>
<td>THAAD</td>
<td>Theater High-Altitude Area Defense</td>
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<tr>
<td>TM</td>
<td>Theater missile</td>
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<td>UN</td>
<td>United Nations</td>
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<td>World War I</td>
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Legislation for the 1997 Quadrennial Defense Review (QDR) required that it identify the threats faced by the United States and evaluate future U.S. strategy and force structure. The QDR discussed the concept of “asymmetric challenges” or “asymmetric means” as a major thrust of future threats.*

In an era when U.S. forces appear dominant across a range of potential conflicts, many observers question whether serious threats still exist. But U.S. dominance generally exists against relatively symmetric threats, where adversaries seek to directly combat U.S. strengths. It seems more likely that future adversaries will seek to attack U.S. vulnerabilities using strategies different from the standard U.S. strategies. We refer to such threats as asymmetric strategies.**

* See William S. Cohen, Report of the Quadrennial Defense Review, Department of Defense, May 1997, in particular pp. 4 and 49–51, but also pp. vii, 12, 13, 19, 41, and 43.

In the post-Cold War era, the United States faces a range of threats. Many it understands and prepares for well. The difficulty with adversary use of asymmetric challenges occurs when the United States and its military leaders in particular fail to fully appreciate these challenges.

Prospective U.S. adversaries are actively carrying out information denial to prevent the United States from understanding their efforts. Such countries as Iraq and North Korea have made it difficult for the United States to identify many of the key weapons on which they are working, let alone their strategy and concepts of operation (CONOPs). For example, which kinds of and how much chemical and biological weapons (CBW) have Iraq or North Korea produced, where are they stored, and how would they be used?

The importance of appreciating asymmetric challenges comes from the fact that modern warfare demands preparation. Training, doctrine, CONOPs, military research and development (R&D) and acquisitions, force structure, and force posture are all affected in a major way by threat assessments. Threats must be appreciated well before they are mature so that preparations can be completed to counter the threats, especially in a fiscally constrained environment.

For example, only since early 1997 has the CBW threat been better appreciated. It will take years for the United States to prepare well for the CBW threat, leaving the United States and its allies vulnerable over that time and requiring the development of new U.S. strategies and CONOPs to minimize this vulnerability.

Most unappreciated threats are asymmetric in nature. Indeed, the asymmetric character of such threats contributes to their not being appreciated.
Defining Asymmetric Strategies

Asymmetric strategies attack vulnerabilities not appreciated by the target or capitalize on limited preparation against the threat.

1) They rely primarily on concepts of operations fundamentally different from those of the target and/or from those of recent history—often employing different weapons—and/or
2) Can serve political or strategic objectives substantively different from those the target pursues.

Nonvital interests are very vulnerable to asymmetric threats:
- Threats can focus on will, not defeating the military in detail.
- The will threshold can be low (e.g., Beirut or Mogadishu).

The essence of asymmetric strategy is not new:
- Sun Tzu, maneuver warfare, centers of gravity, etc.

Asymmetric strategies attack vulnerabilities not appreciated by the “target” (victim) or capitalize on the victim’s limited preparation against the threat. These strategies rely (primarily, but not exclusively) on CONOPs that are fundamentally different from the victim's and/or from those of recent history. They often employ new or different weapons. Additionally, they can serve political or strategic objectives that are not the same as those the victim pursues. It is important to recognize that symmetric and asymmetric strategies are defined in relative terms: Some strategies are more asymmetric than others.

For an asymmetric challenge to be threatening, it must target a key vulnerability or dependency of the victim. Because U.S. military actions today usually support less-than-vital interests, adversaries can threaten the will or commitment of the United States and its allies rather than having to defeat U.S. military forces in detail. Indeed, when U.S. interests are limited, an adversary threat need impose only a modest cost to defeat U.S. will (as in Beirut or Mogadishu), opening a wider diversity of strategies to an adversary.

Targeting key vulnerabilities is not unique to the concept of asymmetric strategies; comparable historical concepts have included: the writings of Sun Tzu, maneuver warfare, and centers of gravity.

For example, airpower is a U.S. center of gravity in almost any U.S. and allied operation. Most prospective U.S. adversaries cannot field air forces adequate to counter U.S. air forces: They cannot afford to symmetrically challenge U.S. airpower air-to-air. Instead, they field surface-to-air missiles and air defense artillery as their primary form of air defense; the United States fields similar systems but anticipates countering most adversary air forces in an air-to-air
mode first; U.S. air defense systems are normally perceived as a backup rather than a primary defense, a modest asymmetry. North Korea apparently believes that the best way to counter U.S. and allied air forces is to use Scud missiles to deliver persistent chemical weapons to theater air bases, disrupting sortie generation. While the United States has also emphasized air base attack, this approach is very asymmetric, relying on both weapons and delivery systems different from what the United States would consider using for air base attack and causing both operational and strategic effects (including a high possibility of inducing U.S. retaliation) different from what the United States would seek to cause.
As the examples on this chart suggest, relatively few CONOPs and battles are purely asymmetric; most involve a mixture of symmetry and asymmetry. Yet the more asymmetric the challenge, the less likely the country facing the challenge is or has been to appreciate it, at least until it is surprised by the challenge (which is often too late for an effective response).

Note that asymmetries in political/strategic objectives also matter. For example, in the Yom Kippur War of 1973, the Israelis discounted the possibility of an Egyptian attack because they viewed Egyptian goals symmetrically, assuming that total control of the Suez Peninsula was all that mattered, and thus Egypt had no prospect for victory. Two months before the Egyptian surprise attack, Israeli Defense Minister Moshe Dayan stated to the Israeli Staff College: “The balance of forces is so much in our favor that it neutralized the Arab considerations and motives for the immediate renewal of hostilities.” The Egyptians goals were asymmetric: “Firm Egyptian military control of a substantial strip of territory on the east bank of the Canal would be deemed a success.” In this context, the Egyptian buildup of the late summer west of the Suez and deployment of SAM systems and large numbers of infantry-borne antitank missiles all should have been quite threatening to Israel. Had Egypt’s strategic goals been understood in Tel Aviv, its tactical and operational moves could have been appreciated and more effectively countered.*

Asymmetric challenges can be applied across the phases of major theater wars or smaller-scale contingencies. Several prospective U.S. adversaries carry out significant peacetime information campaigns today (for example, Saddam Hussein's efforts to deny the United States partners and access in the Persian Gulf by arguing that the U.S.-led UN sanctions against Iraq are killing thousands of innocent Arabs). Military preparations by prospective adversaries suggest that they are positioning themselves to carry out asymmetric threats that would jeopardize U.S. force flows and warfighting plans. Most adversaries require such facilitating CONOPs to offset U.S. advantages and give them a chance for success.

Most U.S. adversaries would prefer to prevent U.S. intervention because without that intervention they will likely succeed; fighting and defeating the United States is clearly a poor alternative. To prevent U.S. intervention, adversaries will likely apply asymmetric challenges in peacetime, in a crisis, and very early in a conflict. Such challenges would attack U.S. willpower or significantly disrupt U.S. planning, causing a U.S. strategic pause or convincing the United States to disengage. For example, a lack of regional access for U.S. forces might impair U.S. capabilities to conduct a campaign. Or the United States may not be able to deploy its forces as planned if there is an early loss of host nation support, such as dock workers, stemming from CBW strikes or the threats thereof.

The United States can expect adversaries to oppose a counteroffensive using asymmetric threats. Especially for North Korea, the planned U.S./allied counteroffensive would threaten the survival of the adversary regime, causing the adversary to threaten or use the worst weapons available (e.g., BW).
Some might argue that our definition of asymmetric threats seems all-encompassing, from a U.S. perspective, including everything outside of a rather small set of U.S. strategies or those recently practiced. However, this view confuses the number of theoretically possible strategies with the number of strategies actually practiced. The vast majority of strategies actually practiced are relatively symmetric for several reasons. The strengths and weaknesses of symmetric strategies and related CONOPs are well understood. Militaries are usually more comfortable preparing to “fight the last war.” Innovation is invariably risky; these risks provide significant incentives to use symmetric approaches. For these reasons, relatively symmetric strategies have tended to be more commonly practiced.

While weapons are not the essence of asymmetry, several weapon systems are consistently seen as part of adversary asymmetric strategies because these weapons are capable of threatening U.S. forces and (in some cases) U.S. society. These weapons include CBW, theater missiles, special forces, terrorism, advanced surface-to-air missiles (SAMs), deep-sea mines, diesel submarines, and information warfare.

In MTWs, any given asymmetric challenge will usually not prove to be a “silver bullet” that defeats U.S. military power, but a combination of such challenges, in particular the synergies those challenges achieve if the United States is unprepared for them, is likely the best bet an adversary has in a military confrontation with the United States. But in cases where the U.S. interests are far from vital, even a single asymmetric act may be sufficient to defeat U.S. will, as happened in Beirut with the bombing of the Marine barracks.
What kinds of asymmetric threats might the United States face in the future? Adversaries could consider a wide range of threats, some of which, such as affecting international perceptions and creating strategic events, are ongoing or have happened within recent memory. Other threats have not yet happened and some are not very likely (e.g., attacks that cause massive destruction within the United States), though none can be completely ruled out. The threats can be posed against U.S. military capabilities (e.g., the threat of CW attacks on military airfields), political and economic interests (e.g., terrorism), or some combination (e.g., mines in the Strait of Hormuz), and many threats may be more strategic in character, bringing the implications of regional conflicts home to the United States rather than leaving such conflicts in a theater thousands of miles away. Adversaries do need to worry that attacks on the United States could backfire and lead to serious U.S. escalation.

Surprise in one form or another will often play a role. Strategically, likely adversary coercive and limited scenarios rely fundamentally on the ability of the adversary to present the United States with a fait accompli. Tactically, adversaries may also achieve key surprises (e.g., a mine hit on a warship or civilian oil tanker).

Many asymmetric strategies also target the long-term international competition. For example, the status of being a “WMD state” provides adversaries with coercive leverage, and compels the United States to address full-dimensional protection more seriously, raising the costs of foreign involvement. In general, these effects are to the detriment of the United States and its interests.
During the Cold War, military analysis and policy were dominated by high-end, relatively symmetric threats (strategic nuclear and NATO Central Front). Most analysts were trained to think in such symmetric terms and find it difficult now to adapt to asymmetric challenges. Specifically, asymmetric threats challenge U.S. thinking for several reasons: a lack of strategic appreciation (e.g., the CBW threat in Korea before 1997); a lack of tactical/operational appreciation (e.g., knowing terrorism is a threat in Saudi Arabia but not knowing where, when, and how terrorists would strike Khobar Towers); the time lag for implementing responses given appreciation (e.g., the CW threat in Korea since 1997); and inherent difficulty of preparation (e.g., countering all terrorism, even if the United States were willing to spend money and make other sacrifices, would be problematic).

These problems could exist for symmetric or asymmetric threats. However, three factors make these types of underpreparation (and the first two, in particular) more likely in cases of asymmetric threats. First, when intelligence on adversary strategy and CONOPs is lacking (as it commonly is for prospective U.S. adversaries), cognitive biases push individuals to “mirror image.” This will lead them to overlook or discount asymmetric possibilities. Second, organizational theory suggests that large bureaucracies have trouble “thinking outside of the box,” changing “standard operating procedures” and perceptions. These group biases both decrease the chance that an organization will recognize an asymmetric threat and stifle the degree to which it can evaluate the range of effects that could be caused by an asymmetric threat. Finally, resource constraints can create strategic myopia, allowing other priorities (e.g., acquisition of fighter aircraft or destroyers or artillery) to receive more attention.
Adversaries are more likely to use asymmetric threats against the United States in the future than they have been in the past. While nations normally emulate successful strategies, the U.S. strategy is too expensive. Instead, adversaries must strive to overcome biases against innovation and search for affordable, viable asymmetric alternatives. The proliferation of CBW, theater missiles, and other advanced weapons provides a variety of new tactical and coercive possibilities that can be very effective even for poor adversaries. In short, adversaries will have both the motives and the means for testing innovation to deter or defeat U.S. actions.

Many analysts trained during the Cold War are tempted to focus on symmetric threats, which still exist in the militaries of most prospective adversaries but tend not to be significant. The end of the Cold War has also removed the prospect of an alternative superpower patron for adversaries and increased the frequency with which the United States intervenes abroad. In the post–Cold War era, the United States has become relatively safe, while its potential adversaries feel (increasingly) threatened. Attacks against the United States are becoming very tempting, especially using deniable terrorism as an asymmetric threat.

The incorporation of information revolution technologies into the military not only enhances U.S. capabilities substantially, but also adds new dependencies (especially in the context of substantial force structure drawdowns). These new technologies create potentially valuable targets for asymmetric strategies. Additionally, some argue that the pace of war has quickened. This will put a premium on preparation, and as argued above, preparation is particularly difficult against asymmetric threats.
Countering Asymmetric Strategies

The United States cannot afford to fully protect itself against the diverse range of prospective asymmetric challenges and thus needs to develop a shaping strategy to address them. This strategy would seek to dissuade adversaries from developing asymmetric threats, to deter adversaries from using already developed threats, and to deny their ability to employ the remaining threats effectively. An aggressive information operations campaign is needed to achieve these shaping outcomes, with particular emphasis on peacetime engagement. Deterrence will also require the United States to reinvigorate its deterrence logic and establish new concepts for escalation control.

A shaping strategy must rely on U.S. intelligence to improve its ability to recognize and appreciate asymmetric challenges. Doing so requires more extensive strategic surveillance and an innovative approach that develops reasonable evaluations of adversary strategies from its perspective. Good intelligence reduces the probability of surprise and should give the United States time to respond to many adversary preparations.

Once the range and likelihood of potential adversary threats have been identified, the United States needs to develop a robust and innovative set of counters that neutralizes key threats and gives the initiative to U.S. and allied forces. These counters must reduce U.S. vulnerabilities and will likely draw on U.S. asymmetric strengths. Some counters will be specific to the threats (e.g., vaccines countering BW), though improved force packaging is a general requirement for full-dimensional protection. The United States must also limit its foreign military commitments that do not represent vital interests, while actively and publicly making the case for what constitutes vital interests.
In seeking to reduce its vulnerabilities, the United States should move toward deploying modules of full-dimensionally protected forces rather than using a piecemeal approach.* For example, forward-deployed forces should be supported by CBW protection, missile defenses, capable security forces that cover the base area and well beyond, and so forth. In crisis or conflict as forces deploy abroad, they should bring with them (or even be preceded by) similar defenses. The United States provides some elements of protection with every force it deploys overseas, but full-dimensional protection is not adequately understood today, let alone practiced by the U.S. military.

The cost of such protection is high and may force the United States to increase the size of its military, reduce its foreign commitments (consistent with the argument above that the United States needs to focus on more-vital interests), or rely more on the revolution in military affairs. The cost of protection may tempt the United States to respond only to threats that intelligence indicates adversaries are actively pursuing. This view may be reasonable in the short term and could establish short-term protection priorities, but in the long term will only tempt adversaries to adapt their capabilities to threaten residual vulnerabilities. U.S. choices for preparation will affect the threats it faces, and unless U.S. intelligence on such evolving threats is superlative, the United States is likely better off taking at least some protective actions preemptively against each of the range of possible threats in order to deter adversary challenges.

* Full-dimensional protection is one of the key operational concepts in *Joint Vision 2010*, U.S. Joint Chiefs of Staff, 1996.
Summary

In many ways, U.S. ascendancy to conventional military superiority provides the major incentive for adversaries to pursue asymmetric challenges. Other changes in military and technological affairs provide further incentives.

Adversary asymmetric threats will likely change the course of future wars and change the attributes of military forces that will lead to success in those campaigns. The United States must prepare to deal with asymmetric challenges against its vulnerabilities or potentially pay the price that historical militaries and societies have paid for inadequately perceiving the threats they would face. Some of these threats are extremely serious and must be deterred.

Responding to asymmetric threats will not be easy. The United States yet lacks an adequate concept of what these threats could be or the nature of adversary objectives and the strategies adversaries will pursue. The United States is also some distance from having the strategies necessary to deal with asymmetric threats. Progress in these areas will require a significant intelligence shift away from tactical military issues and toward adversary strategies and their vulnerabilities. U.S. strategies to counter asymmetric threats will involve a significant "shaping" effort. As these strategies develop, the United States may well decide that new concepts must be applied to a wide range of military issues, including force structure, force posturing, force protection, and military commitments. A follow-on RAND effort is under way to examine the strategies needed to respond to asymmetric threats and the potential implications of these strategies for the Department of Defense.